

May 12, 2006

Lt. Ken Kusano  
U.S. Coast Guard  
2100 Second Street, S.W.  
Washington, D.C. 20593-0001

Mr. Dwight Sanders  
California State Lands Commission  
Division of Environmental Planning and Management  
100 Howe Avenue, Suite 100-South  
Sacramento, CA 95825-8202

Subject: Revised Draft Environmental Impact Report for the Cabrillo Port Liquefied Natural Gas (LNG) Deepwater Port, Ventura and Los Angeles Counties, California (State Clearinghouse # 2004021107)

Dear Lieutenant Kusano and Mr. Sanders:

The U.S. Environmental Protection Agency (EPA) has permitting responsibilities under the Clean Air Act and the Clean Water Act for the proposed Cabrillo Port Liquefied Natural Gas (LNG) Deepwater Port project. We have been working with the U.S. Coast Guard (USCG), California State Lands Commission (SLCS), and other state agencies and county air districts to ensure that this project satisfies all federal, state and local requirements. We previously commented on the Preliminary Draft Environmental Impact Statement/Environmental Impact Report for this project on October 8, 2004 and on the Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) on December 21, 2004.

We have reviewed the Revised Draft Environmental Impact Report (RDEIR) and appreciate the additional information that has been provided about this project since the Draft EIS/EIR. We have identified inconsistencies between the RDEIR and the air and water permit applications as well as other concerns regarding impacts to air and water resources and environmental justice communities that USCG and CSLC should address in the Final Environmental Impact Statement/Environmental Impact Report (Final EIS/EIR). Our detailed comments regarding these issues and concerns are enclosed.

We appreciate the opportunity to review this RDEIR and look forward to continuing to work with you to ensure that the project's impacts are avoided or mitigated to the fullest extent possible. When the Final EIS/EIR is released for public review, please send three copies to the address above (mail code: CED-2). If you have any questions, please contact me at 415-972-3988 or Summer Allen, the lead reviewer for this project. Summer can be reached at 415-972-3847 or allen.summer@epa.gov.

Sincerely,

*Original signed by*

Duane James, Manager  
Environmental Review Office

Enclosures:

EPA's Detailed Comments

cc: Michael Ferris, U.S. Maritime Administration  
Michael Villagas, Ventura County Air Pollution Control District  
Mohsen Nazemi, South Coast Air Quality Management District  
Mark Durham, US Army Corps of Engineers  
Jonathan Bishop, Los Angeles Regional Water Quality Control Board  
Chuck Damm, California Coastal Commission

## **Air Resources**

### General Conformity

The federal general conformity requirements apply to all federal actions that occur in federal nonattainment or maintenance areas. Because the Cabrillo Deepwater port is located outside of the federal nonattainment area of Ventura County, general conformity does not apply to the port even though emissions from ships or other operations at the port could be transported into the federal nonattainment area. However, general conformity does apply to other federal actions related to the Deepwater port that occur onshore (e.g., Army Corps Section 404 permit) and are within the federal nonattainment/maintenance areas of Ventura and Los Angeles Counties.

In March 2006, the U.S. Coast Guard (USCG) issued a Draft General Conformity Determination addressing all federal actions associated with the Cabrillo port (onshore and offshore). On April 28, 2006, EPA found that the Draft General Conformity Determination did not meet the requirements of 40 CFR Part 93.158(d) and 93.156(d), and therefore, should not be finalized.<sup>1</sup> We agreed with the USCG that construction-related NOx emissions in Los Angeles County do not conform to the South Coast State Implementation Plan (SIP) because documentation regarding NOx emissions offsets has not been provided to the USCG by BHP Billiton (BHP). We recommended that USCG issue a new Draft General Conformity Determination after an affirmative finding of conformity can be made consistent with the 40 CFR Part 93 requirements. We recommended that this new determination include all "supporting materials which describe the analytical methods and conclusions relied upon in making the applicability analysis and draft conformity determination." (See 40 CFR Part 93.1560(a)). We also had additional, specific edits for the Determination.

To demonstrate the on-shore construction activities conform to the South Coast SIP, the applicant intends to use mitigation through emissions offsets as described at the bottom of page 4.6-27. EPA recommends that the following be added to MM AIR-1a in Table 4.6-20 "Summary of Air Quality Impacts and Mitigation Measures":

"In addition to the Construction Emissions Mitigation Plan, the Applicant proposes to fully offset total annual NOx emissions from the on-shore construction operations in Los Angeles County."

### Project-Related Air Emissions

BHP has also recently submitted more detailed information regarding its planned emission reduction program, which is referenced at lines 24-29 on page 4.6-33 of the

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<sup>1</sup> Letter available at USCG Docket website at <http://www.dms.dot.gov> and identified by the document number: USCG -2004-16877-990.

RDEIR. Mitigation measure AM AIR-4a should be revised to reflect this new information. Specifically, BHP has entered into contracts to retrofit two marine vessels (long haul tugs) by replacing two propulsion engines and two auxiliary engines with modern low emitting engines (Tier 2 compliant diesel fired engines). BHP currently estimates that the repowering of one Sause Brothers tug could result in emission reductions of approximately 123 tons per year of NOx, and the repowering of one Olympic tug and Barge tug could result in emission reductions of approximately 96 tons per year. However, EPA has not yet completed its own analysis of emission reductions to be expected from retrofitting these two marine vessel engines.

## **Water Resources**

### National Pollutant Discharge Elimination System (NPDES) Permitting

With regards to the potential effects of the proposed discharges from the Cabrillo Port, the conclusions of the RDEIR are similar to the previous Draft EIS/EIR, namely that the discharges would generally not have significant environmental effects. We noted in our previous letter that some of the volumes and descriptions of the discharges in the Draft EIS/EIR did not match the information in the NPDES permit application. While the RDEIR provides some updated information in this regard, we still have the following concerns:

- 1) The RDEIR provides a figure of 63,400 gal/week for deck washdown water (p. 2-25, line 3). This figure appears to have come from a letter to EPA dated January 24, 2005. However, the applicant has subsequently provided a revised figure of 264,000 gal/year which should be used instead in the Final EIS/EIR.
- 2) The RDEIR provides a figure of 142,000 gal/hour for the cooling water discharge (p. 2-28, line 10), which agrees with our NPDES permit application (3.4 MGD). However, Table 4.7-8 and Appendix H1 of the RDEIR use a different figure of 6.34 MGD. This latter figure appears to have come from a letter to EPA dated May 18, 2004 which has since been revised to 3.4 MGD. We recommend use of the 3.4 MGD figure throughout the Final EIS/EIR.
- 3) The RDEIR provides an estimate of the volume of stormwater (30 gal/min) discharged from the FSRU “when it rains” (p. 2-29, line 13). However, the assumptions behind the estimate such as the size of the rainfall event are not provided. This information should be provided in the Final EIS/EIR.
- 4) The RDEIR includes volumes of gray water and black water estimated to be discharged (p. 2-36, lines 23 through 36) that are different from those provided to EPA. The figures provided to EPA are 1,368 gal/day for black water and 1,257 gal/day for gray water. The figure in the RDEIR for black water is 90 gal/day and should be updated in the Final EIS/EIR.

## Impacts to Waters of the United States

The Final EIS/EIR should disclose the Applicant's preferred water crossing method for each onshore pipeline location and the range of alternative crossing methods that could be employed at the location. The method that results in the least environmental damage or impact to each specific aquatic resource location should be identified. Additionally, for each location where an aquatic resource could potentially be affected by the proposed project, provide a description of the type of activity that would result in the impact, provide a list of potential avoidance and minimization measures that can be employed at this specific site. We note that the Clean Water Act (CWA) Section 404(b)(1) Guidelines (40 CFR Part 230) provide that all waters of the United States must be avoided, and impacts minimized and offset, regardless of the appearance of special status species.

Installation of the pipeline, either by Horizontal Directional Drilling (HDD) or trenching, will result in the creation of excavated materials. For the shore crossing HDD activity, the RDEIR states that a drilling fluids confinement pit would be constructed but it does not address how all excavated materials from the HDD operation would be handled or the disposal location(s) of these materials. The Final EIS/EIR should include the specific details for the handling, transport and disposal of all materials, including drilling muds, created from the HDD operations. This should include a discussion on the ultimate disposal location(s) for all excavated materials from the proposed project.

The RDEIR indicates that four offshore alternative sites were eliminated from further consideration as they were located within the Channel Islands National Park (page 3-17) and the Channel Islands National Marine Sanctuary (CINMS), and unlikely to be determined to be consistent with the intended uses of these areas. The RDEIR (e.g., Figure ES-3, Figure 1.0-1) indicates that the proposed action may occur within the boundaries of the CINMS. Pages ES 35 and 36 also note that the CINMS is currently preparing a supplemental EIS to evaluate boundary changes to the CINMS. It notes that the FSRU is located within some of the areas included in the boundary changes and that the citing of the FSRU would preclude these boundary expansions. This is a cumulative impact to the area that should be addressed in the Final EIS/EIR.

## **Impacts to Environmental Justice Communities**

EPA is concerned that the potentially affected population has not been clearly defined. Table 4.19.2 shows the total number of individuals along the Center Road Pipeline and Alternatives 1, 2 and 3, but the text does not explain how the total number of individuals was calculated (due to census blocks that intersect the pipeline route or census blocks that intersect a buffer of 824 feet from the pipeline route).

Page 4.19-6, line 8 states that "the detailed census block analysis of ethnic composition of the population focuses only on the Hispanic and Latino population along the Center Road Pipeline proposed route." Although the analysis of city of Oxnard showed that only the Hispanic and Latino populations exceeded the values for the

reference community, a detailed census block analysis of all racial and ethnic groups might reveal additional pockets of minority communities along the pipeline routes. EPA recommends that this section be revised to include a detailed census block analysis for each racial and ethnic group for all of the potential pipeline routes. Also, a detailed census block analysis should be conducted to identify potential pockets of low-income populations for all of the pipeline routes.

Pages 4.19-7 and 4.19-8, Table 4.19-3 shows 19 census blocks affected by the Center Road Pipeline Route where the percentage of Hispanic or Latino individuals exceeds the percentage for the State of California. Page 4.19-16, states that “During onshore pipeline operations, potential impacts may occur from a release of natural gas from a leak or pipe rupture at any point along the pipeline route...The long-term potential safety impacts associated with the operation of this transmission line (the potential for a release of natural gas from a leak or rupture of the pipeline followed by ignition and burning of the gas cloud) represents an environmental justice concern.” However, mitigation is only proposed for 2 (Block 1019 of Census Tract Number 47.02 and Block 2012 of Census Tract Number 47.04) of the 19 minority census blocks. The Final EIS/EIR should discuss potential mitigation measures for the other 17 census blocks with identified minority communities.

Section 4.20.3.19 only discusses cumulative impacts to the identified minority and low-income populations due to other pipeline projects. However, environmental justice communities are concerned about all environmental burdens which can potentially affect their communities.<sup>2</sup> EPA recommends that a table be added to this section which lists all of the cumulative impacts discussed in Section 4.20, Cumulative Impacts, that potentially affect the identified minority and low-income populations along the proposed pipeline routes. The RDEIR states that the Crystal Energy project would include pipelines that also traverse the City of Oxnard, Ventura County, and the City of Santa Clarita (Section 4.20.3.18). This is the only other project referenced in this section that addresses the cumulative impacts affecting the environmental justice community.

There are other past, present, and reasonably foreseeable future projects or actions that may contribute to cumulative impacts to the environmental justice community. *Cumulative risk*, as defined by EPA, is “the cumulative risks from aggregate exposure to multiple agents for stressors.” Examples of possible sources of stress include the existing gas pipeline network, abandoned hazardous waste sites, power plants and other permitted facilities, and urban runoff.

## **Mitigation Measures**

As we previously commented on the Draft EIS/EIR, the analysis discusses direct and indirect impacts under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), and defines four categories of impacts

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<sup>2</sup> Ensuring Risk Reduction in Communities with Multiple Stressors: Environmental Justice and Cumulative Risks/Impacts. National Environmental Justice Advisory Council. December 2004. Available at: <http://www.epa.gov/compliance/resources/publications/ej/nejac/nejac-cum-risk-rpt-122104.pdf>

(Classes I - IV). A Class III impact is considered to be an adverse impact that does not exceed an issue's significance criterion (significance criteria are defined for each resource in Chapter 4, Environmental Analysis).

NEPA requires that mitigation measures be discussed for all impacts, even those that by themselves would not be considered significant.<sup>2</sup> However, there are 15 Class III impacts among 10 resources analyzed in Chapter 4 that do not have any mitigation measures proposed for them. The 10 resources are Aesthetics (1), Air Quality (1), Biological Resources - Marine (4), Geological Resources (1), Hazardous Materials (1), Noise (1), Recreation (1), Socioeconomics (3), Transportation (1), and Water Quality and Sediments (1). The Final EIS/EIR should discuss mitigation measures for all adverse impacts disclosed in Chapter 4, including the 15 Class III impacts that have no measures proposed in the RDEIR.

### **Editorial Clarifications**

The Final EIS/EIR should make the following clarifications:

- 1) We note that BHP has submitted revised emissions estimates to EPA, and thus the air emissions data in the Final EIS/EIR may need to be updated. The revised estimates submitted by BHP were corrected for errors and contained new information on the engines they plan to utilize.
- 2) In estimating the emission potential of the equipment onboard the FSRU, page 4.6-14 of the RDEIR states an assumption that no more than five submerged combustion vaporizers (SCVs) will be operated simultaneously. According to the air permit application submitted to EPA in December 2005, BHP intends to operate the equivalent of four SCVs at 100% load (see page 2-4, for example), which could equate to the use of all eight SCVs at 50% load. The Final EIS/EIR should clarify this discrepancy.
- 3) The description of how EPA has applied state air regulations at page 4.6-18, lines 24 to 27 is incorrect. EPA suggests that the Final EIS/EIR state the following:

*...This law further stipulates that these Project activities would be subject to all Federal rules and regulations and to those of the "nearest adjacent coastal state." The state of California has created local air pollution districts and pursuant to California Health & Safety Code, Division 26, Part 3, each district establishes and enforces local air pollution regulations in order to attain and maintain all state and federal ambient air quality standards. The districts permit and control emissions from stationary sources of air pollution.*

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<sup>2</sup> See 40 CFR 1502.16(h), Section 1505.2(c), and CEQ Forty Questions No. 19(b). See also EPA's comment on "Mitigation and Pollution Prevention" in our March 31, 2004, scoping letter on the project's Notice of Intent.

*To apply the applicable law of California with respect to air pollution therefore requires a determination of the appropriate air pollution control district. For this proposed project, EPA has determined that the Ventura County Air Pollution Control District (VCAPCD) portion of the California SIP contains the applicable air permitting regulations of the nearest adjacent coastal State.*

4) Page ES-28 of the RDEIR states that EPA determined the Federal Prevention of Significant Deterioration (PSD) regulations would not apply to the Project since potential emissions are below major source thresholds. For clarity, EPA recommends that the Final EIS/EIR additionally state the applicant is required to obtain a pre-construction permit pursuant to Rule 10 of the Ventura County portion of the California SIP.

5) Table 4.6-15 summarizes several major federal, state, and local rules and regulations related to air quality, and discusses the applicability of each with respect to the proposed project. In discussing the applicability of VCAPCD Rule 26 (New Source Review), the RDEIR states, “the USEPA concluded that Rule 26 does not apply to the FSRU and that emission offsets are not required for Project sources constructed in the area where the FSRU is proposed to be sited (Zimpfer 2005a)”. This is correct in that EPA concluded offsets are not required for the New Source Review permitting of the FSRU, as the FSRU is being permitting in the same manner as sources located in the portion of Ventura County that is designated as attainment under the federal standards. However, EPA wishes to clarify that the project is not exempt from Rule 26 in its entirety, which includes Rules 26.1 through 26.11. Table 4.6-15 should more precisely state that EPA concluded *Rule 26.2* does not apply to the FSRU. A similar revision should be made to page 4.6-33 in the discussion of Impact AIR-4.

6) In discussing project applicability of PSD at page 4.6-20 in Table 4.6-15, it would be more accurate to state "The USEPA has determined that the FSRU is not subject to PSD regulations because the ~~overall function of the~~ FSRU does not meet the definition of one of the 28 named source categories and the Potential To Emit (PTE)..." since fossil fuel boilers could have been part of the FSRU without being part of its overall function.

7) The first sentence under the Air Quality section on page ES-3 at line 24 should clarify that EPA has determined that the FSRU should be permitted in the same manner as sources on the Channel Islands that are part of Ventura County, since there are Channel Islands which are a part of Los Angeles and Santa Barbara counties. A similar revision should be made to Table 4.6-15 on page 4.6-19 of the RDEIR.

8) Table 4.6-15 on page 4.6-19 of the RDEIR states, “Ventura County is classified as a Federal ozone nonattainment area.” This table should more accurately state that the *mainland* portion of Ventura County is classified as a



Federal ozone nonattainment area since Anacapa Island and San Nicolas Island are also part of Ventura County but are designated as attainment. Similarly, the discussion of the air quality of Ventura County at pages 4.6-3 and 4.6-4 does not specify whether this discussion applies to mainland Ventura (which is nonattainment under the Federal ozone standard) or all of Ventura County, including Anacapa and San Nicholas islands. The Final EIS/EIR should make this clarification, and changes should also be made at page 4.6-19 in Table 4.6-15 in the "Key Elements" discussion of Conformity.

9) The statement on page 4.6-4 (at lines 26-27) should also be reworded to state, "The U.S. Environmental Protection Agency (USEPA) compares ambient air criteria pollutant measurements with NAAQS to assess the status of air quality of regions *within the states of the U.S.* with respect to criteria air pollutants...Based on these comparisons, regions *within the states of the U.S.* and California are designated as one of the following categories."

### **Additional Information**

As noted throughout our comments, BHP has submitted to EPA updated information (on the project's estimated air emissions and the proposed mitigation of air emissions) in the following documents, which are posted to our website for this project at:

<http://www.epa.gov/region9/liq-natl-gas/cabrillo-air.html>, under "Supporting Materials>Materials Originated by Applicant":

- 1.) Report on Sause Brothers Tug Repowering Project, (May 2, 2006)
- 2.) Letter to Amy Zimpfer, EPA (April 21, 2006)
- 3.) Letter to Margaret Alkon, EPA with attachment (April 14, 2006)
- 4.) Letter to Amy Zimpfer, EPA (April 11, 2006)
- 5.) Letter to Bob Fletcher, California Air Resources Board, with attachments (April 11, 2006)
- 6.) Letter to Margaret Alkon, EPA, with attachments (April 7, 2006)